

---

LABORATORY

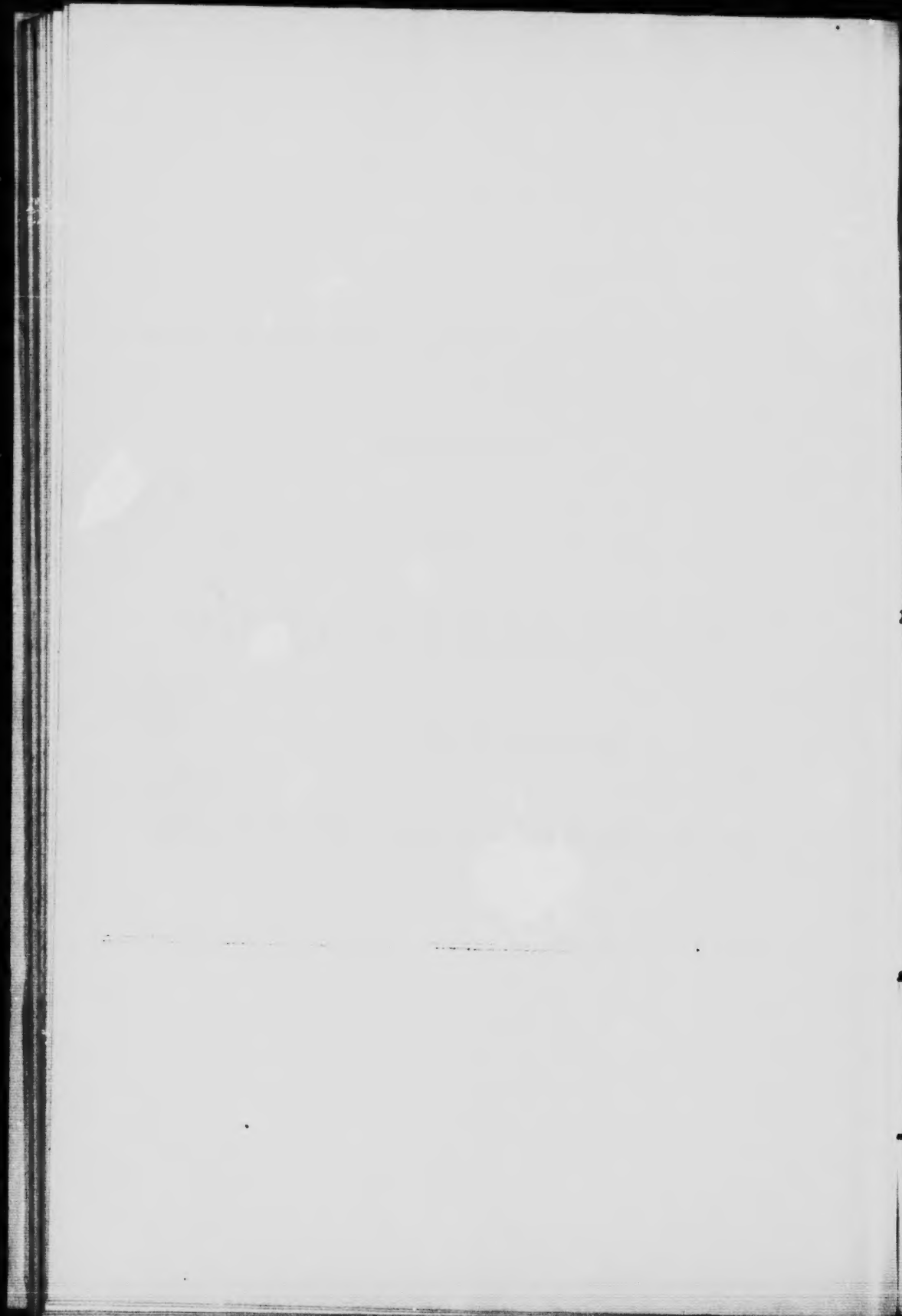
OF THE

INLAND REVENUE DEPARTMENT

BULLETIN No. 104.

JAMS, MARMALADES AND JELLIES.

---



# LABORATORY

OF THE

## INLAND REVENUE DEPARTMENT

### BULLETIN No. 104.

### JAMS, MARMALADES AND JELLIES.

OTTAWA, June 15, 1905.

W. J. GERALD, Esq.,  
Deputy Minister of Inland Revenue.

SIR,—I have the honour to submit a report upon Jams, Marmalades and Jellies, collected during May, in accordance with instructions contained in File 90179.

Ninety-eight samples have been analyzed in this laboratory; and the numerical results of analysis are contained in the accompanying tables. In addition to the samples analyzed, a sample of *Red Currant* (25561) was broken in transit, and the following numbers, making no claim to be fruit products, were not analyzed:

No. 20292	—calvesfoot jelly.
" 22281	} Gelatine package jelly powders.
" 22283	
" 22285	
" 22287	
" 22289	
" 22290	
" 24686	

The samples analyzed are classified as follows:—

Jams —		6 samples
Black currant.....		2 "
Gooseberry.....		10 "
Peach.....		10 "
Plum.....		15 "
Raspberry.....		12—55
Strawberry.....		14
Jellies.....		29
Marmalades.....		—
Total.....		98

Table I gives, as usual, the source of each sample, and a statement of claims made regarding it. Succeeding tables give, in detail, the results of analysis.

I may remark that the column headed "Residual Cane Sugar" has reference only to that portion of the cane sugar added which is not inverted by the operations of manufacture, and is no indication of the amount of cane sugar originally added. The next column "Non-Cane Sugar Solids"—contains more or less of the cane sugar, now changed into *invert sugar*, together with glucose, or other matters used in manufacture.

The percentage amount of glucose stated in the "Remark" column is derived from considerations which are more fully given in Bull. 96 (revised) pp. 18 and 19. As there explained, the quantity of glucose is only approximated, and must not be considered accurate within 5 to 10 per cent. My conclusion as given, is always a conservative one.

The subjoined table gives a synopsis of the results of analysis :—

Articles.	Kind.	Total number of Samples.	Found Genuine.	Containing Glucose.	Containing Preservatives.	Containing Dyes.
Jam.....	Black currant..	6	2	4	3	3
	Gooseberry .....	2	0	2	0	0
	Peach.....	10	1	9	1	0
	Plum.....	10	1	9	1	0
	Raspberry .....	15	5	10	3	9
	Strawberry.....	12	3	9	3	6
	Total.....	55	12	43	11	18
Marmalade.....		29	13	16	1	3
Jelly.....		14	8	6	3	8
	Total.....	98	33	65	15	29

It will be seen that of the total number of samples examined :—

66 per cent contained glucose.

15 " " preservatives.

30 " " dyes.

I have the honour to be, sir,

Your obedient servant,

A. MCGILL,

*Acting Chief Analyst.*

# INSPECTION OF JAMS AND JELLIES—TABULATED STATEMENT (I).

Date of Collection.	Nature of Sample	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by Vendor.	Inspector's Remarks.
				Quantity.	Price.		
1905.			<i>District of Nova Scotia—R. J. Waugh, Food Inspector.</i>		\$ cts.		
May	2 Black currant jam.	20288	W. C. Anderson, Halifax, N.S.	3 jars	0 45	Douglas McIntosh, Toronto.	Sold as Curzon brand.
"	2 Peach jam.	20289	H. W. Wentzell & Co., Halifax, N.S.	1 "	0 25	J. W. Windsor, Montreal.	
"	2 Marmalade, orange	20290	Craig & Hodgson, Halifax, N.S.	3 "	0 30	McGregor, Toronto.	
"	2 Raspberry jam.	20291	E. W. Crease, Halifax, N.S.	2 "	0 40	Pure Gold Company, Toronto.	
"	2 Calves foot jelly.	20292	W. J. Hogwood, Halifax, N.S.	2 "	0 50	E. Lazenby & Son, London, Eng.	
"	2 Marmalade, orange	20293	R. Urquhart & Son, Halifax, N.S.	3 "	0 90	Jas. Keiller & Son, Dundee, Scotland	
"	"	20294	James Hogan, Halifax, N.S.	3 "	0 38	Upton, Toronto.	
"			<i>District of Prince Edward Island—T. Moore, Food Inspector.</i>				
"	3 Plum jam	24425	Waugh & Steeves, Summerside.	3 qts.	0 48	J. A. Perreault, Montreal.	
"	3 Marmalade.	24426	J. H. Leck, Summerside.	3 jars	0 48	T. A. Lytle, Toronto.	
"	"	24427	R. F. Maddigan, Charlottetown.	3 crocks.	0 35	Upton.	
"	4 Raspberry jam	24428	R. & G. G. Charlottetown.	3 "	0 45	J. W. Windsor, Montreal.	
"	4 Marmalade.	24429	Jenkins & Son, Charlottetown.	3 qts.	0 51	Pure Gold Mfg. Co., Toronto.	
"	4 Plum jam	24433	R. F. Maddigan, Charlottetown.	3 crocks.	0 45	R. F. Maddigan, Charlottetown.	
"			<i>District of New Brunswick—Ferguson, Food Inspector.</i>				
"	2 Peach jam	23805	King, Asbell & Co., Queen St., Sussex, N.B.	3 jars	0 36	E. D. Smith, Winona, Ont.	
May	2 Grape jelly	23806	J. T. Ryan, 254 Main St., Moncton	3 "	0 45	"	
"	2 Orange marmalade	24001	Harry G. McBeath, 239 Charlotte St., St. John, N.B.	3 "	0 48	Liptons, London, Eng., G.R.	
"	9 Black currant jam.	24002	J. W. Robinson, King St., St. Stephen.	3 "	0 45	The Simcoe Canning Co., Simcoe, Ont.	
"	11 Raspberry jam.	24003	Jas. Burgess & Son, Grand Falls, N.B.	3 "	0 36	The McCormick 'Iz. Co., London, Ont.	
"	12 Strawberry jam.	24004	Sullivan Bros., Woodstock, N.B.	3 "	0 45	Upton.	
"	15 Apple jelly.	24012	E. G. F. Van, cor. York and King Sts., Fredericton.	"	0 90	Mrs. John Ferguson, Ba.oux-Dumfries Parish, N.B.	Did not guarantee purity: sold as received.

# INSPECTION OF JAMS AND JELLIES—TABULATED STATEMENT (1)—Continued.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cont.		Name and Address of Manufacturer or Furnisher as given by Vendor.	Inspectors Remarks.
				Quantity.	Price.		
1906.			<i>District of Quebec—Geo. Mulrooney, Food Inspector.</i>		\$ cts.		
April 21	Raspberry jam.	25008	N. Moisan, Quebec, Que.	3 pkgs.	0 30	Jas. Lamourcan, Montreal.	
" 21	Plum jam.	25009	" "	3 "	0 30	" "	
" 21	Strawberry jam.	25010	" "	3 "	0 30	" "	
" 21	"	25011	" "	3 "	0 30	Paquet et Paquet, Montreal.	
" 21	Raspberry jam.	25012	" "	3 "	0 30	" "	
" 21	Plum jam.	25013	" "	3 "	0 30	" "	
" 21	Marmalade.	25014	" "	3 "	0 30	" "	
" 24	Marmalade.	25015	N. Moisan, Quebec.	3 pkgs.	0 45	Upton, Toronto.	
" 24	"	25016	" "	3 "	0 60	T. A. Lytle, Toronto.	
" 24	"	25017	" "	3 "	0 45	Sheriff, Toronto.	
			<i>District of St. Hyacinthe—J. C. Rouleau, Food Inspector.</i>				
" 25	Strawberry jam.	24685	P. Morin, Actonville.	3 cans.	0 30	Cartier, Gallbraith & Co., Montreal.	
" 25	Orange jelly.	24686	R. J. Leroux, Roxton Falls.	3 pkgs.	0 30	Pure Gold Mfg. Co., Toronto.	
" 25	Peach jam.	24687	Elisier Turgeon, Roxton Falls.	3 glasses.	0 15	Hudson. Omaha, Montreal.	
" 26	Strawberry jam.	24688	A. Thibault, Stanfold.	3 cans.	0 45	L. Chaput et fil., Montreal.	
" 27	Gooseberry jam.	24689	Avard & Nadeau, Beauce Junction.	3 glasses.	0 45	A. B. Dupuis, Quebec.	
May 1	Lime fruit marmalade.	24690	E. Goyette, Cowansville.	3 "	0 60	B. Ger & Co., London, Eng.	
" 2	Upton's black currant jam.	24691	McNamara & Jones, Bedford, Que.	3 "	0 50	F. des Bros., Montreal.	
" 3	Upton's orange marmalade.	24692	J. F. Rollard, Bedford, Que.	3 "	0 30	L. Chaput, fils et cie, Montreal.	
" 3	Plum jam.	24693	Ed. Kervick, St. Alexander of Ilerville.	3 pkts.	0 75	J. A. Ferrault, Montreal.	
" 4	Upton's plum jam.	24694	R. Gough, St. Jean, Que.	3 glasses.	0 30	Hudson, Hichert et cie, Montreal.	

*District of Montreal—J. C. Fergusson,  
Food Inspector.*

April 25 Grape fruit mar-  
malade.  
" 25 Raspberry jam.  
" 25 Strawberry jam.  
" 25 Peach jam.  
" 25 Marmalade.  
" 26 "  
" 26 Apple jelly.  
" 26 Plum jam.  
" 26 Black currant jam.  
" 26 Peach jam.  
" 26 Plum jam.  
" 26 Strawberry jam.

252832 J. N. Archambault, 2495 Notre Dame St.  
252833 D. Chevalier, 2265 Notre Dame St.  
252834 A. Ferron, 208 McCord St.  
252835 H. Dechamps, 37 McCord St.  
252836 W. Fleury, 314 Centre St.  
252837 Currie Bros., 59 Bleury St.  
252838 "  
252839 Geo. Fichette, 2062 St. Catherine St.  
252840 H. Poirier, 1938 St. Catherine St.  
252911 A. Lamy, 1862 St. Catherine St.  
252922 "  
252923 A. Fournier, 1749 St. Catherine St.

Word compounded in small letters  
on label.

0 25 Mrs. Loko, Montreal.  
0 30 Upton's.  
0 38 Queen City Brand.  
0 40 E. Dufour, Montreal.  
0 30 Mrs. Lake, Montreal.  
0 20 Vendors.  
0 60 "  
0 45 Upton's.  
0 30 "  
0 25 Toronto Canning Co.  
0 25 Montreal Canning Co.  
0 40 Paquet & Poirier, Montreal.

*District of Kingston—J. J. Castigan,  
Food Inspector.*

April 27 Strawberry jelly.  
" 27 Black currant jam.  
" 27 Orange marmalade.  
" 27 Raspberry jam.  
" 27 Red currant jam.  
" 27 Black currant jam.  
" 28 Raspberry jam.  
" 28 Strawberry jam.

25557 Anderson Bros., Division St., Kingston.  
25558 D. Couper, Princess St., Kingston.  
25559 James Kelly, Princess St., Kingston.  
25560 James Redden & Co., Princess St., Kingston.  
25561 "  
25562 James Redden & Co., Princess St., Kingston.  
25563 H. T. Murray, King St., Brockville.  
25564 "

Labelled, absolutely pure with  
word 'Compounded' in  
small characters on label.

0 30 Aylmer Canning Co.  
0 75 Pure Gold Co., Toronto.  
0 30 Canada Preserving Co.  
0 30 Aylmer Canning Co.  
0 30 "  
0 60 E. D. Smith, Windsor, Ont.  
0 30 Standard Canning Co.  
0 30 "

Starling Brand.

*District of Toronto—J. J. Castigan,  
Food Inspector.*

May 4 Peach jam.  
" 4 Gooseberry jam.  
" 4 Marmalade.  
" 4 Raspberry jam.  
" 4 Strawberry jam.  
" 4 Raspberry jam.  
" 4 Marmalade.

25568 A. G. Bain, King St. E., Hamilton.  
25569 "  
25570 Taylor Bros., 87 John St., Hamilton.  
25571 Frank Smith, 139 John St., Hamilton.  
25572 John A. Carpenter, Market Square, Hamilton.  
25573 "  
25574 John A. Carpenter, Market Square, Hamilton.

Lily Brand—Labelled contrary to  
Act. Absolutely Pure Com-  
pounded.  
Labelled—Pure fruit, then word  
'Compounded' also on label.  
Same labelling as 25570.

0 45 Upton's.  
0 45 "  
0 30 "  
0 51 Standard Canning Co.  
0 30 "  
0 45 E. D. Smith, Windsor, Ont.  
0 30 McLaughlin, Toronto.

# INSPECTION OF JAMS AND JELLES—TABULATED STATEMENT (1.)—Concluded.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by Vendor.	Inspectors Remarks.
				Quantity.	Price.		
1905.			<i>District of Toronto—J. J. Costigan, Food Inspector—Con.</i>		8 cts.		
May	5 Raspberry .....	25575	J. Duggan, 455 Yonge St., Toronto.	3 jars.	0 75	Pure Gold Mfg. Co. ....	
"	5 Red currant jelly.	25576	" "	3 "	0 75	" "	
"	5 Marmalade .....	25577	W. Eddy, 365 1/2 Yonge St., Toronto.	3 "	0 30	McGregor's, Toronto.	
"	5 Strawberry jam.	25578	" "	3 "	0 60	Lipton's, Ltd. ....	
"	5 Raspberry preserves.	25579	" "	3 "	0 54	McGregor's, Toronto.	
			<i>District of London—T. Kidd, Food Inspector.</i>				
"	1 Sherriff jelly .....	22281	Beck & Schell, Berlin, Ont.	3 pks.	0 25	Imperial Extract Co., Toronto.	
"	1 Peach jam.	22282	Stuebning & Co., Berlin, Ont.	3 "	0 30	Lumsten, Hamilton	
"	1 Jelly, Pure Gold.	22283	George Haemflug, Waterloo, Ont.	3 "	0 30	Pure Gold Mfg. Co., Toronto.	
"	1 Jam, raspberry flavour.	22284	A. K. Roesech, Waterloo, Ont.	3 "	0 30	Hunderford, Smith & Co., Toronto.	
"	2 Jelly powder.	22285	Jackson & Son, Guelph, Ont.	3 "	0 25	Hamilton Coffee & Spice Co., Hamilton	
"	2 Orange marmalade	22286	A. J. Fitzsimmons, Guelph, Ont.	3 "	0 30	Upton, Toronto.	
"	2 Jelly, Lipton's.	22287	J. A. McCrory, Guelph, Ont.	3 "	0 25	Lipton, London, Eng.	
"	2 Graham's marmalade.	22288	J. A. McRory, Guelph, Ont.	3 "	0 25	Canada Preserving Co., Hamilton	
"	2 Jelly, Pure Gold.	22289	McKay Bros., Georgetown	3 "	0 30	Pure Gold Mfg. Co., Toronto	
"	3 Royal Jelly Powder	22290	Joseph Kidd, Athlone, Ont.	3 "	0 30	F. F. Dalley & Co., Hamilton	
May	4 Marmalade.	22291	J. Edward & Son, Beeton, Ont.	3 pots.	0 30	Upton, Toronto.	
"	5 Upton's jam .....	22292	Geo. Gordon, Tottenham, Ont.	3 "	0 30	Canada Grocery Co., Hamilton.	
			<i>District of Manitoba—W. M. Conklin, Food Inspector.</i>				
"	2 Jam.	23968	M. R. Schumann, Virdon, Man.	3 jars.	0 60	The Canada Preserving Co.	
"	2 Jelly.	23969	Frank Higgins, Virdon.	3 "	0 45	The Canada Biscuit Co., Toronto.	
"	2 Jelly.	23970	Chingham, Seales & Wilcox, Virdon.	3 "	0 60	E. D. Smith, Winona, Ont.	
"	4 Marmalade.	23971	A. Grant, Brandon	3 "	0 60	T. A. Lyttle & Co., Toronto.	



"	"	4 Jelly.	23972 W. J. Young, Brandon.	3 "	0 30 The Dysen Gibson Co., Winnipeg.
"	"	4 Jelly.	23973 Smith & Burton, Brandon.	3 "	0 75 Macdonochie Bros., London, Eng.
<i>District of Calgary—R. W. Fletcher, Food Inspector.</i>					
"	"	11 Marmalade.	21793 Hudson Bay Co., Edmonton.	3 pots.	0 75 James Keiller & Son, Scotland.
"	"	11 Peach jam.	21796 Revillon Bros., Edmonton.	3 "	0 60 Upton's, Hamilton, Ont.
"	"	11 Strawberry jelly.	21797 W. F. Studbaker, Edmonton.	3 "	0 75 Aylmer Canning Co., Aylmer.
<i>District of British Columbia—E. B. Parkinson, Food Inspector.</i>					
"	"	7 Plum jam.	24982 H. Lee, Vancouver.	3 5-lb	1 50 Climax Empress Mfg. Co., Vancouver.
"	"	8 Currant jelly.	24984 Mrs. Duff, 910 Western Ave., Van- couver.	3 pots.	0 45 Cutting Packing Co., San Francisco, U.S.
"	"	8 Strawberry jelly.	24985 E. Clayton, Vancouver.	3 "	0 60 Empress Mfg. Co., Vancouver.
"	"	8 Raspberry jam.	24986 S. T. Wallace, Vancouver.	3 jars.	0 75 Meier Long, San Francisco.
"	"	8 Marmalade.	24987 Langdale & Co., Vancouver.	3 "	0 45 Baker Leeson & Co., Vancouver.
"	"	8 Strawberry jam.	24989 Labelle & Co., Vancouver.	3 tins.	0 45 J. W. Windsor, Montreal.
"	"	8 Raspberry jam.	24990 Clarke & Rogerson, Vancouver.	3 jars.	0 75 Bishop & Co., Los Angeles, Cal.
"	"	8 Peach jam.	24991 J. Deal, Vancouver.	3 tins.	0 30 Simcoe Canning Co., Simcoe, Ont.

TABLE II.—BLACK CURRANT

Serial Number.	Collector's Number.	Solids, Per Cent.			Water.	SACCHARIMETER READINGS— NORMAL WEIGHT TO 100CC.			Residual Cane Sugar. (Clerget.)	Soluble Matter, other than Cane Sugar.
		In- soluble.	Soluble.	Total.		Direct.	Invert.	Differ- ence.		
1	20288	4.16	63.9	68.1	31.9	+83.5	+72.1	11.4	8.5	55.4
2	24003	3.69	59.7	63.4	36.6	+71.5	+52.8	18.7	13.9	45.8
3	24691	1.10	69.6	70.7	29.3	+51.9	+26.7	25.2	18.0	51.6
4	25290	1.78	59.3	61.1	38.9	+41.2	+24.3	16.9	12.6	46.7
5	26562	10.28	52.9	63.2	36.8	+13.8	-16.8	30.6	22.9	40.0
6	26558	14.28	56.0	70.3	29.7	-2.1	-18.7	16.6	12.3	43.6
7	25561	.....	.....	.....	.....	.....	.....	.....	.....	.....

## GOOSEBERRY

8	24689	2.90	55.0	57.9	42.1	+98.4	+93.0	5.4	4.3	50.7
9	26569	3.06	45.8	48.9	51.1	+18.5	+7.6	10.9	8.2	37.6

TABLE III.—PEACH

10	20289	1.63	67.5	69.1	30.9	+88.0	+66.7	21.3	15.9	51.6
11	21796	1.31	67.8	69.1	30.9	+45.5	+13.8	31.7	23.6	44.2
12	22282	12.00	53.5	65.5	34.5	+52.0	+22.5	29.5	22.0	31.5
13	22292	1.96	47.3	49.2	50.8	+40.7	+22.1	18.6	13.8	33.5
14	23895	7.30	47.6	54.9	45.1	+20.9	-13.4	34.3	25.6	22.0
15	24687	7.10	55.5	62.6	37.4	+60.1	+49.4	10.7	7.1	48.4
16	24991	2.89	58.2	61.1	38.9	+63.3	+43.3	20.0	14.9	43.3
17	25285	1.53	59.6	61.1	38.9	+27.4	+12.7	14.7	15.4	44.2
18	25291	6.98	59.2	66.2	33.8	+75.7	+63.7	12.0	9.0	50.2
19	26568	1.94	65.4	67.3	32.7	+32.0	+1.9	30.1	22.4	43.0

## JAM, JUNE, 1905.

Preservatives.	Dyes.	Remarks.
Salicylic acid..	None. . .	Contains about 45 per cent glucose and a preservative. No label.
None. ....	Present. . .	Contains about 35 per cent glucose and is dyed. Labelled 'Black Currant Jam, Pure, the Lennox Canning Co., Simcoe, Ont.'
"	None.....	Contains about 20 per cent glucose. Labelled 'Upton's Black Currant Jam.'
Salicylic acid..	"	Contains about 20 per cent glucose and a preservative. Labelled 'Upton's Black Currant Jam.'
None. ....	Present. . .	Genuine fruit and sugar. Is dyed. Labelled 'Black Currant Preserves,' F. D. Smith's Fruit Farms, Winona, Ont.
Benzoic acid..	"	Genuine fruit and sugar. Contains benzoic acid and is dyed. Labelled 'Black Currant,' 'Absolute Purity,' 'Pure Gold.'
.....	.....	Sample broken in carriage.

## JAM

None .....	None. . .	Contains about 50 per cent glucose. Labelled 'Gardner Brand,' 'Erie Gooseberry.'
"	"	Contains about 20 per cent glucose. Labelled 'Gooseberry—finest quality guaranteed—Upton's home made.'

## JAM, JUNE, 1905.

.....	None.....	Contains about 40 per cent glucose. 'Coronation Pure Fruit Jam, J. W. Windsor, Montreal.'
None.....	"	Marked 'Pure Fruit Compound.' Contains about 15 per cent glucose. Labelled 'Upton's Peach Jam.'
"	"	Marked 'Pure Fruit.' Contains about 20 per cent glucose. Labelled 'Peach Jam, Pure Fruit—Preserved by Standard Canning Co., Hamilton.'
"	"	Contains 15 to 20 per cent glucose. Labelled 'Upton's Peach Jam.'
"	"	Genuine. Labelled 'E. D. Smith's Peach Jam,' Fruit Farm, Winona, Ont.
"	"	Contains about 30 per cent glucose. No label.
Benzoic acid..	"	Contains about 30 per cent glucose and a preservative. Labelled 'Simcoe Peach, Pure Jam'—The Simcoe Canning Co., Ont.
None.....	"	Marked 'Pure Fruit.' Contains about 15 per cent glucose. Labelled 'Confitures de Pêches—A. Anatolle, Bayeux, France. France E. Doufour, seul agent, Montreal.'
"	"	Contained 1 peach stone per 100 grammes. Contains about 40 per cent glucose. Labelled 'Queen City Brand, Peach Jam—The Toronto Jam and Pickle Co., Toronto.'
"	"	Marked 'Finest Quality.' Contains about 10 per cent glucose. Labelled 'Upton's Home-made Peach Jam—Guaranteed.'

TABLE IV.—PLUM

Serial Number.	Collector's Number.	Solids, Per Cent.			Water.	SACCHARIMETER READINGS— NORMAL WEIGHT TO 100cc.			Residual Cane Sugar. (Clerget.)	Soluble Matter, other than Cane Sugar.
		In- soluble.	Soluble.	Total.		Direct.	Invert.	Differ- ence.		
20	22292	5.58	63.8	69.4	30.6	+ 46.3	+ 36.2	10.1	7.5	56.3
21	24425	6.00	66.7	73.3	26.7	+ 65.9	+ 47.6	18.3	13.5	40.0
22	24433	3.01	59.0	62.0	38.0	- 7.6	- 11.6	4.0	3.0	56.0
23	24684	3.78	53.6	57.4	42.6	+ 32.9	+ 9.5	23.4	16.7	36.9
24	24693	6.73	66.8	73.5	26.5	+ 77.7	+ 62.9	14.8	11.0	55.8
25	24982	0.60	64.	65.2	34.8	+ 70.1	+ 45.7	24.4	18.2	46.4
26	25289	4.16	54.9	59.1	40.9	+ 28.1	+ 6.8	21.3	15.9	39.0
27	25292	7.32	54.4	61.7	38.3	+ 68.9	+ 67.8	1.1	0.8	53.6
28	26009	8.50	57.4	65.9	34.1	+ 49.2	+ 44.5	4.7	3.5	53.9
29	26013	8.16	55.1	63.3	36.7	+ 96.8	+ 93.8	3.0	2.2	52.9

TABLE V.—RASPBERRY

30	20291	6.47	58.2	64.7	35.3	+ 5.2	- 17.6	22.8	17.1	41.1
31	23968	1.23	44.5	45.7	54.3	+ 41.8	+ 30.5	11.3	8.4	36.1
32	24005	2.09	63.0	65.1	34.9	+ 52.5	+ 36.1	14.4	10.7	52.3
33	24430	1.17	50.0	51.2	48.8	+ 68.6	+ 53.3	15.3	11.4	38.6
34	24986	3.77	69.9	73.7	26.3	+ 86.7	+ 81.5	5.2	3.1	66.8
35	24990	7.18	45.9	53.1	46.9	+ 5.9	- 9.8	15.7	11.7	34.2
36	25283	1.13	56.2	57.3	42.7	+ 28.6	+ 11.4	17.2	12.8	43.4
37	26008	4.60	56.3	60.9	39.1	+ 66.2	+ 45.8	20.4	16.2	41.1
38	26012	2.92	62.4	65.3	34.7	+ 107.0	+ 103.4	3.6	2.7	59.7
39	26560	3.85	60.3	64.2	35.8	+ 32.2	+ 18.7	13.5	10.0	50.3
40	26563	3.13	71.0	74.1	25.9	+ 106.2	+ 81.9	24.3	18.1	52.9
41	26571	2.56	41.1	43.7	56.3	+ 46.7	+ 34.3	12.4	9.3	31.8
42	26573	2.64	70.7	73.3	26.7	+ 20.8	- 23.7	44.5	33.2	37.5
43	26575	4.37	58.6	63.7	37.0	+ 14.5	- 19.0	33.5	25.0	33.6
44	26579	13.57	47.9	61.5	38.5	+ 10.0	- 13.1	23.1	17.2	30.7

## JAM—JUNE, 1905.

Preservatives.	Dyes.	Remarks.
None.....	None.....	Four stones per 100 grammes. The duplicate of this number is a peach jam. Contains about 30 per cent glucose.
None.....	None.....	Four stones per 100 grammes. Marked 'Compound.' Contains about 35 per cent glucose. Labelled 'Finest pure, healthful jams and jellies, compound, J. A. Perreault, 50 Rue Pleas, Montreal.'
None.....	None.....	Three stones per 100 grammes. Genuine. Labelled 'Home-made preserves, warranted pure, boiled with granulated sugar, R. F. Maddigon, Charlottetown.'
None.....	None.....	Three stones per 100 grammes. Marked 'Pure fruit, compound.' Contains about 15 per cent glucose.
Salicylic acid..	None.....	Four stones per 100 grammes. Marked 'Compound.' Contains about 40 per cent glucose and a preservative. Labelled 'De Salaberry plum jam, compound, J. A. Perreault, Montreal.'
None.....	None.....	No stones present. Marked 'Mixture.' Contains about 35 per cent glucose. Labelled 'Plum jam, Climax brand, jam and jellies, Vancouver, B.C.'
None.....	None.....	Three stones per 100 grammes. Marked 'Finest quality.' Contains about 10 per cent glucose. No label.
None.....	None.....	Five stones per 100 grammes. Contains about 45 per cent glucose. Labelled 'Banner brand plum jam, Montreal Canning and Preserving Co.'
None.....	None.....	Seven stones per 100 grammes. Contains about 35 per cent glucose. No label.
None.....	None.....	Four stones per 100 grammes. Contains about 50 per cent of glucose. Labelled 'Ont. plum jam, prepared by Paquet & Paquet, Montreal.'

## JAM—JUNE, 1905.

Benzoic acid..	Present ..	Genuine, but contains benzoic acid, and is dyed. Labelled 'Raspberry jam, absolute purity, pure gold.'
None.....	Present ..	Marked 'Absolutely pure, compound.' Contains about 25 per cent glucose, and is dyed. Labelled 'Graham's Lily brand raspberry jam, pure compound, Canning and Preserving Co., Hamilton.'
None.....	Present ..	Contains about 25 per cent glucose, and is dyed. Labelled 'Raspberry jam, The McCormick Mfg. Company, London, Canada'
Salicylic acid..	Doubtful ..	Contains about 40 per cent glucose and a preservative. Labelled 'Castle brand choice jams and jellies, prepared by J. W. Windsor, Montreal.'
None.....	Present ..	Contains about 50 per cent glucose, and is dyed. No label.
None.....	None.....	Genuine. Labelled 'Bishop & Co. raspberry jam.'
None.....	Present ..	Marked 'Pure fruit, compound.' Contains about 15 per cent glucose, and is dyed. Labelled 'Raspberry jam, Upton's jams, pure fruit, compound.'
None.....	None.....	Contains about 30 per cent glucose. No label.
None.....	None.....	Contains nearly 55 per cent glucose. Labelled 'Ont. raspberry jam, prepared by Paquet & Paquet, Montreal.'
None.....	Present ..	Contains about 20 per cent glucose, and is dyed. No label.
None.....	Present ..	Contains about 50 per cent glucose, and is dyed. Labelled 'Raspberry, pure fruit jam, preserved by Standard Canning Co., Hamilton.'
None.....	Present ..	Marked 'Pure fruit, compound.' Contains about 25 per cent glucose, and a dye. Labelled 'Pure fruit, raspberry, compound, Standard Canning Co., Hamilton.'
None.....	Doubtful ..	Labelled 'E. D. Smith's raspberry preserves, fruit farms, Winona, Minn.'
None.....	Present ..	Genuine fruit and sugar, but is dyed. No label.
Salicylic acid..	None.....	Genuine. Containing a preservative. Labelled 'McGregor (trade mark) preserves, Toronto, Ont.'

TABLE VI.—STRAWBERRY

Serial Number.	Collector's Number.	Solids, Per Cent.			Water.	SACCHARIMETER READING— NORMAL WEIGHT IN 100CC.			Residual Cane Sugar. (C. per cent.)	Soluble Matter other than Cane Sugar.
		In- soluble.	Soluble.	Total.		Direct.	Invert.	Differ- ence.		
45	22284	9.22	46.5	55.7	44.3	+26.7	+14.6	12.1	9.0	37.5
46	24008	1.10	68.4	69.5	30.5	+45.1	+27.9	17.2	12.8	56.6
47	24685	2.35	35.5	38.4	61.6	+ 2.6	-11.8	14.4	10.7	24.8
48	24688	2.81	21.5	24.3	75.7	- 4.3	- 6.0	1.7	1.3	30.2
49	24989	1.16	68.1	69.3	30.7	+91.8	+76.2	15.6	11.6	56.5
50	25284	3.54	56.0	59.5	40.5	+105.7	+92.4	13.3	9.9	46.1
51	25293	1.14	46.8	49.9	50.1	+68.5	+58.9	9.6	7.1	41.7
52	26010	8.30	57.8	66.1	33.9	+23.5	+46.8	23.7	17.0	40.8
53	26011	4.00	59.3	63.9	36.1	+97.1	+90.8	6.3	4.7	54.6
54	26564	0.36	53.2	53.6	46.4	+24.7	+13.0	12.7	9.5	43.7
55	26572	0.08	45.2	46.2	53.8	+76.5	+70.5	6.0	4.4	40.8
56	26578	3.56	69.2	72.8	27.2	+34.6	-15.2	49.8	37.2	32.0

JAM, JUNE, 1905.

Preservatives.	Dyes.	Remarks.
Benzoic acid..	Present...	Contains about 15 per cent glucose; a preservative and a dye. Labelled 'Strawberry Jam', J. Hungerford Smith Co., Ltd., Toronto.
None .....	None.....	Contains about 25 per cent glucose. Labelled 'Upton's Strawberry Jam.'
" .....	" .....	Genuine. No label.
" .....	" .....	Genuine. Is preserved with a minimum of sugar. Labelled 'Strawberry Jam', K. B. Morison & S. Hagerman, Belleville, Ont.
Salicylic acid..	" .....	Contains about 55 per cent of glucose and a preservative. Labelled 'Ice Castle Brand', Choice Jams and Jellies, J. Windsor, Montreal.
None.....	" .....	Contains about 50 per cent glucose. Labelled 'Strawberry, Queen City Brand Jam and Jelly', 224 Dorchester St. Quebec.
Salicylic acid..	Present...	Contains about 40 per cent glucose; a preservative and a dye. Labelled 'Strawberry Homestead Jam', packed from selected fruit, Paquet & Co., Montl.
None.....	" .....	Contains about 30 per cent glucose and is dyed. No label.
" .....	None.....	Marked 'Compound'. Contains about 50 per cent of glucose. Fig seeds are present.
" .....	Present...	Contains about 15 per cent glucose and is dyed. Labelled 'Strawberry Pure Fruit Jam', Standard Canning Co., Hamilton.
" .....	" .....	Marked 'Pure' and 'Compound'. Contains about 40 per cent of glucose and is dyed. Labelled 'Graham's Lily Brand Strawberry', absolutely pure compound, Hamilton.
" .....	" .....	Genuine fruit and sugar. Is dyed. Labelled 'Lipton's Strawberry Jam', M. F. Lipton, Ltd., London.

TABLE VII.—MARMALADES

Serial Number.	Collector's Number.	Solids, Per Cent.			Water.	POLARIMETER READINGS— NORMAL WEIGHT IN 100CC.			Residual Cane Sugar. (Clerget.)	Soluble Matter other than Cane Sugar.
		In-soluble.	Soluble.	Total.		Direct.	Invert.	Difference.		
1	20290	1.8	61.7	63.5	36.5	+15.6	-18.3	33.9	25.3	36.4
2	20293	1.7	79.0	71.7	28.3	+28.2	-21.0	49.2	36.7	33.3
3	20294	1.7	64.0	65.7	34.3	+60.0	+18.5	41.5	30.9	33.1
4	21795	2.1	70.0	72.1	27.9	+21.6	-19.0	40.6	30.3	39.7
5	22286	2.3	72.0	74.3	25.7	+84.9	+28.6	56.3	42.0	30.0
6	22288	0.9	72.0	72.9	27.1	+94.1	+45.7	48.4	36.1	35.9
7	22291	1.6	68.0	69.6	30.4	+67.6	+26.7	40.9	30.5	37.5
8	23071	1.2	74.0	75.2	24.8	+65.8	+45.4	20.4	15.2	58.8
9	24001	2.3	70.0	72.3	27.7	+29	-10.4	39.9	29.8	40.2
10	24426	1.2	60.0	61.2	38.8	+43.3	+38.1	5.2	3.8	56.2
11	24429	2.0	68.0	70.0	30.0	+59.4	+25.6	33.8	25.2	42.8
12	24432	0.5	56.0	56.5	43.5	+6.9	-14.5	21.4	16.0	40.0
13	24690	0.8	68.0	68.8	31.2	+22.7	+8.5	14.2	10.2	57.8
14	24692	2.1	66.8	68.9	31.1	+71.0	+24.8	46.2	34.4	32.4
15	24987	0.7	65.8	66.5	33.5	+21.8	+20.8	1.0	0.7	65.1
16	25282					+41.6	-20.9	62.6	46.6	
17	25286					+10.4	-17.2	27.6	20.6	
18	25287	1.7	63.7	65.4	34.6	+27.4	-18.0	45.4	33.8	29.9
19	26014	3.2	65.0	68.2	31.8	+49.1	+11.8	37.3	28.0	37.0
20	26015	3.4	53.2	56.6	43.4	+3.3	-19.3	22.6	17.0	36.2
21	26016	1.1	62.6	63.7	36.3	+0.4	-20.1	20.5	16.0	46.6
22	26017	2.0	62.7	64.7	35.3	+20.3	-20.8	41.4	30.7	32.0
23	26559	1.2	68.7	69.9	30.1	+76.9	+29.0	47.9	35.7	33.0
24	26570	1.3	67.4	68.7	31.3	+99.6	+61.0	38.6	28.6	38.8
25	26574	4.0	68.2	72.2	27.8	-6.9	-13.7	6.8	5.0	63.2
26	26577	2.0	61.6	63.6	36.4	+8.7	-15.2	23.9	1.8	59.8
27	I.	1.6	64.0	65.6	34.4	+36.0	+8.8	27.2	20.3	43.7
28	II.	1.5	58.5	60.0	40.0	+19.0	-9.4	28.4	21.1	37.4
29	III.	1.3	65.5	66.8	33.2	+40.5	-15.4	55.9	41.7	23.8



JUNE, 1905.

Preservatives.	Dyes.	Remarks.
None.....	None.....	Genuine. Labelled 'McGregor (trade mark) Marmalade', Toronto.
".....	".....	Genuine. Labelled 'James Keiller & Son, Ltd., Dundee Marmalade', Burns & Harris, Great Britain.
".....	".....	Contains about 20 p.c. glucose. Labelled 'Dundee Upton's Orange Marmalade'.
".....	".....	Genuine. 'James Keiller & Sons Dundee Marmalade.'
".....	".....	Contains about 25-30 per cent glucose. Upton's Orange Marmalade, Pure Fruit Compound.
".....	".....	Contains about 35 per cent glucose. Graham Lily Brand Marmalade, Absolutely pure, Canning and Preserving Co.
".....	".....	Contains about 35 per cent glucose. Upton's Orange Marmalade, Compound.
".....	Present ..	Contains about 40 per cent glucose and is dyed. Orange Marmalade, Trade Mark, 'Sterling', T. A. Lytle & Co., Toronto.
".....	None.....	Contains about 10 per cent glucose. Lipton's Orange Marmalade. Lipton's, Ltd., Preserve Works, London, England.
".....	Present ..	Contains about 35 per cent glucose and a dye. Orange Marmalade Sterling Brand. T. A. Lytle & Co., Toronto.
".....	None.....	Contains about 20-25 per cent glucose. Upton's Orange Marmalade.
".....	".....	Genuine. Balmoral Marmalade, Toronto.
Salicylic acid..	".....	Contains about 10 per cent glucose and a preservative. Lime Fruit Marmalade.
None.....	".....	Contains about 20-25 per cent glucose. Orange Marmalade.
".....	".....	Contains at least 25 per cent glucose. Balmoral Marmalade, Toronto.
".....	".....	Genuine. 'Mrs. Luke's Delicious Homemade Grape Fruit Marmalade.'
".....	".....	Genuine. 'Mrs. Luke's Delicious Homemade Marmalade.'
".....	".....	Genuine. Currie's Homemade Marmalade.
".....	".....	Contains about 20 per cent glucose. Upton's Orange Marmalade, Compound.
".....	Present ..	Genuine but contains a dye. Orange Marmalade Sterling Brand. T. A. Lytle & Co., Toronto.
".....	None.....	Genuine. Shirreff's Shredded Orange Marmalade, Toronto.
".....	".....	Genuine. Shirreff's Imperial Scotch Marmalade, Toronto.
".....	".....	Contains about 30 per cent glucose. Graham's Lily Brand Orange Marmalade, Compound, Canning and Preserving Co., Hamilton.
".....	".....	Contains about 35-40 per cent glucose. Graham's Lily Brand Marmalade, Canning and Preserving Co., Hamilton.
".....	".....	Genuine. McLaughlin's H <sup>2</sup> Marmalade, Toronto.
".....	".....	Genuine Marmalade.
".....	".....	Contains about 10 per cent glucose.
".....	".....	Contains a little glucose.
".....	".....	Genuine.

TABLE VIII.—FRUIT

Serial Number.	Collector's Number.	Description.	Dry Solids.	Water.	SACCHARIMETER READING— NORMAL WEIGHT TO 100CC.			Residual Cane Sugar, (Clerget.)	Non-Cane Sugar Solids.
					Direct.	Invert.	Difference.		
1	23,969	Red Currant.....	58.3	41.7	+25.0	-19.4	44.4	33.0	25.3
2	23,970	".....	56.7	43.3	-2.8	-18.7	15.9	11.9	44.8
3	23,973	".....	62.6	37.4	+5.9	-18.0	23.9	17.5	45.1
4	24,984	".....	69.7	30.3	+84.9	+52.1	32.8	24.2	45.5
5	26,561	".....	64.3	35.7	+13.0	-22.6	35.5	26.5	37.8
6	26,576	".....	62.6	37.4	-2.6	-14.9	12.3	9.1	53.5
7	24,012	Apple.....	53.9	46.1	+8.1	-26.6	34.7	26.0	27.9
8	25,288	".....	58.9	41.1	+6.9	-15.9	22.8	16.7	42.2
9	23,900	Grape.....	54.1	45.9	-10.9	-20.1	9.2	6.9	47.2
10	21,797	Strawberry.....	65.2	34.8	+25.1	+5.4	19.7	14.6	50.6
11	24,985	".....	67.8	32.2	+67.4	+37.3	30.1	22.5	45.3
12	26,557	".....	63.2	36.8	+11.4	-11.8	23.2	17.3	45.9
13	23,972	Raspberry.....	66.4	33.6	+131.0	+118.4	12.6	9.4	57.0
14	26,557	".....	63.9	36.1	+20.6	-8.0	28.6	21.3	42.6

## JELLY, JUNE, 1905.

Preservatives.	Dyes.	Remarks.
None.....	Present..	Genuine, but contains a dye. Pure Jelly, Red Currant, Canada Biscuit Co., Ltd.
" .....	None.....	Genuine. E. D. Smith's Red Currant Jelly. Fruit Farms, Winona.
" .....	" .....	Genuine. Suffolk Jama, Jellies. Macouchie Bros., London, England.
Salicylic acid..	Present..	Contains about 40 per cent. glucose, a preservative and a dye. Currant Jelly.
None.....	" .....	Genuine, but contains a dye. Red Currant Jelly. Sterling Brand. T. A. Lytle & Co., Toronto.
" .....	" .....	Genuine, but contains a dye. Red Currant. Absolute purity. Pure gold.
" .....	None.....	Genuine. Apple Jelly.
" .....	" .....	Genuine. Apple Jelly.
" .....	" .....	Genuine. E. D. Smith's Grape Jelly. Fruit Farm. Winona, Ont.
" .....	Present..	Contains about 10 per cent. glucose and a dye. Canada First Strawberry Jelly, Aylmer Canning Co., Hamilton.
Salicylic acid..	None.....	Contains about 30 per cent. glucose and a preservative, and labelled Strawberry Jelly, Victoria Cross. The W. H. Malkin Co., Ltd., Vancouver.
None.....	Present..	Contains a little glucose and a dye. Canada First. Red Raspberry Jelly. Aylmer Canning Co., Hamilton.
Salicylic acid..	" .....	Contains fully 70 per cent. glucose, a preservative, and a dye.
None.....	" .....	Contains a little glucose, and is artificially dyed. Canada First. Red Raspberry Jelly. Aylmer Canning Co., Hamilton.